

WEIGHTED FAIR QUEUE HAVING ADJUSTABLE SCALING FACTORABSTRACT

A scheduler for a network processor includes a scheduling queue in which weighted fair queuing is applied.

- 5 The scheduling queue has a range R. Flows are attached to the scheduling queue at a distance D from a current pointer for the scheduling queue. The distance D is calculated for each flow according to the formula  $D = ((WF \times FS)/SF)$ , where WF is a weighting factor applicable to a respective flow; FS is a frame size attributable to the respective flow; and SF is a scaling factor. The scaling factor SF is adjusted depending on a comparison of the distance D to the range R.
- 10